

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Docket Number 300622000123	Application Number 09 925,236
	Applicant Chantan KHOSLA et al.	
	Filing Date August 8, 2001	Group Art Unit 1652
	Mailing Date November 25, 2002	

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
NE	1.	06/1990	4,935,340	Baltz et al.	435	6	
NE	2.	09/1997	5,672,491	Khosla et al.	435	148	
NE	3.	10/1998	5,824,513	Katz et al.	435	76	
NE	4.	11/1998	5,830,750	Khosla et al.	435	252.35	RECEIVED
NE	5.	10/1999	5,962,290	Khosla et al.	435	183	DEC 04 2002
NE	6.	12/1999	6,004,787	Katz et al.	435	183	
NE	7.	02/2000	6,022,731	Khosla et al.	435	252.35	TECH CENTER 1600/2900
NE	8.	05/2000	6,060,234	Katz et al.	435	4	
NE	9.	05/2000	6,063,561	Katz et al.	435	4	
NE	10.	03/2001	6,200,813	Katz et al.	435	467	
NE	11.	08/2001	6,271,255	Leadlay et al.	514	450	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO
NE	12.	10/1983	EP 0092388	Europe			
NE	13.	17.01.92	WO 93/13663	PCT			

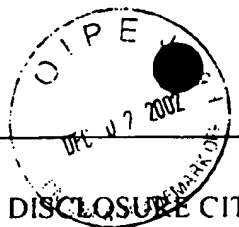
OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
NE	14.	Bartel, et al., "Biosynthesis of anthraquinones by interspecies cloning of actinorhodin biosynthesis genes in streptomycetes: Clarification of actinorhodin gene functions," <i>J Bacteriol</i> (1990) 172(9):4816-4826
NE	15.	Beck, et al., "The multifunctional 6-methylsalicylic acid synthase gene of <i>Penicillium patulum</i> . Its gene structure relative to that of other polyketide synthases," <i>Eur J Biochem</i> (1990) 192:487-498
NE	16.	Bibb, et al., "Analysis of the nucleotide sequence of the <i>Streptomyces glaucescens</i> tcm1 genes provides key information about the enzymology of polyketide antibiotic biosynthesis." <i>EMBO J</i> (1989) 8(9):2727-2735

EXAMINER: <u>NEhed</u> 8/5/04	DATE CONSIDERED:
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OTHER DOCUMENTS *(including author, title, Date, Pertinent Pages, Etc.)*

Examiner Initials	Ref. No.	Title
we	17.	Caballero <i>et al.</i> , "Organisation and functions of the actVA region of the actinorhodin biosynthetic gene cluster of <i>Streptomyces coelicolor</i> ," <i>Mol Gen Genet</i> (1991) 230:401-412
we	18.	Cortes <i>et al.</i> , "n unusually large multifunctional polypeptide in the erythromycin-producing polyketide synthase of <i>Saccharopolyspora erythraea</i> ," <i>Nature</i> (1990) 348:176-178
*	19.	Davis, <i>et al.</i>, "Functional mapping of a polyketide synthase from <i>Aspergillus terreus</i> involved in lovastatin synthesis," <i>Abst of the Genetics of Industrial Microorganisms Mtg</i> (1994) P288:192
we	20.	Donadio <i>et al.</i> , "Modular organization of genes required for complex polyketide biosynthesis," <i>Science</i> (1991) 252:675-679
	21.	Donadio <i>et al.</i> , "Biosynthesis of the erythromycin macrolactone and a rational approach for producing hybrid macrolides," <i>Gene</i> (1992) 115:97-103
	22.	Fernandez-Moreno <i>et al.</i> , "the act cluster contains regulatory and antibiotic export genes, direct targets for translational control by the bldA tRNA gene of <i>Streptomyces</i> ," <i>Cell</i> (1991) 66:769-780
	23.	Fernandez-Moreno <i>et al.</i> , "Nucleotide sequence and deduced functions of a set of cotranscribed genes of <i>Streptomyces coelicolor</i> A3(2) including the polyketide synthase for the antibiotic actinorhodin," <i>J Biol Chem</i> (1992) 267:19278-19290
	24.	Floss, "Genetic engineering of hybrid antibiotics - a progress report," <i>Tetrahydron</i> (1991) 47(31):6045-6058
we	25.	Fu, "Engineered biosynthesis of novel polyketides: Stereochemical course of two reactions catalyzed by a polyketide synthase," <i>Biochemistry</i> (1994) 33(31):9321-9326
we	26.	Hallam, "Nucleotide sequence, transcription and deduced function of a gene involved in polyketide antibiotic synthesis in <i>Streptomyces coelicolor</i> ," <i>Gene</i> (1988) 74:305-320
we	27.	Hershberger <i>et al.</i> , "Genetics and molecular biology of industrial microorganisms," <i>Am Soc for Microbiol</i> (1989) (Washington, D.C.) pages 68-84
	28.	Hopwood <i>et al.</i> , "Antibiotics: opportunities for genetic manipulation," <i>Phil Trans R Soc Lond</i> (1989) B324:549-562
	29.	Hopwood <i>et al.</i> , "Product of 'hybrid' antibiotics by genetic engineering," <i>Nature</i> (1985) 314 (6012):642-644
we	30.	Hutchinson, "Drug synthesis by genetically engineered microorganisms," <i>Ann Review Microbiol</i> (1993) 47:875912
we	31.	Katz <i>et al.</i> , "Polyketide synthesis: Prospects for hybrid antibiotics," <i>Ann. Review Microbiol</i> (1993) 47:875-912

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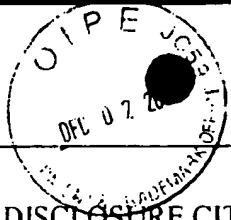
Form PTO-1449	Docket Number 300622000123	Application Number 09-925725
INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Applicant Chantan KHOSLA et al.	
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OTHER DOCUMENTS (including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
kel	32.	Khosla, et al., "Targeted gene replacements in a <i>Streptomyces</i> polyketide synthase gene cluster: role for the acyl carrier protein." <i>Mole Microbiol</i> (1992) 6(21):3237-3249
	33.	Khosla, et al., "Genetic construction and functional analysis of hybrid polyketide synthases containing heterologous acyl carrier proteins," <i>J Bacteriol</i> (1993) 175:2197-2204
	34.	MacNeil et al., "Complex organization of the <i>Streptomyces avermitilis</i> genes encoding the avermectin polyketide synthase," <i>Gene</i> (1992) 115:119-125
	35.	Malpartida et al., "Molecular cloning of the whole biosynthetic pathway of a <i>Streptomyces</i> antibiotic and its expression in a heterologous host," <i>Nature</i> (1984) 309:462-464
	36.	Malpartida et al., "Physical and genetic characterisation of the gene cluster for the antibiotic actinorhodin in <i>Streptomyces coelicolor</i> A3(2)," <i>Mol Gen Genet</i> (1986) 205:66-73
↓	37.	Malpartida et al., "Homology between <i>Streptomyces</i> genes coding for synthesis of different polyketides used to clone antibiotic biosynthetic genes," <i>Nature</i> (1987) 325(6107):818-821
ne	38.	McDaniel et al., "Engineered biosynthesis of novel polyketides," <i>Science</i> (1993) 262:1546-1550
*	39.	Roberts, et al., "6-Deoxyerythronolide B synthase 3 from <i>Saccaropolyspora erythraea</i>: Over-expression in <i>Escherichia coli</i>, purification and characterisation." <i>Biochem Soc Trans</i> (1992) 21:325
ne	40.	Roberts, et al., "Heterologous expression in <i>Escherichia coli</i> of an intact multienzyme component of the erythromycin-producing polyketide synthase," <i>Eur J Biochem</i> (1993) 214:305-311
	41.	Robinson, "Polyketide synthase complexes: their structure and function in antibiotic biosynthesis," <i>Phil Trans R Soc Land B</i> (1991) 332:107-114
	42.	Rohr, "Combinatorial biosynthesis - an approach in the near future?" <i>Angew Chem Int Ed Engl</i> (1995) 34(8):881-885
	43.	Sherman et al., "Structure and deduced function of the granaticin-producing polyketide synthase gene cluster of <i>Streptomyces violaceoruber</i> Tü22," <i>EMBO J</i> (1989) 8:2717-2725
	44.	Sherman et al., "Functional replacement of genes for individual polyketide synthase components in <i>Streptomyces coelicolor</i> A3(2) by heterogenous genes from a different polyketide pathway," <i>J Bacteriol</i> (1992) 174:6184-6190
↓	45.	Strohl, et al., "Expression of polyketide biosynthesis and regulatory genes in heterologous streptomycetes," <i>J Ind Microbiol</i> (1991) 7:163-174
kel	46.	Strohl et al., "Significance of anthraquinone formation resulting from the cloning of actinorhodin genes in heterologous streptomycetes." <i>Molecular Microbiology</i> (1992) 6(2):147-152
*	47.	Fiori, et al., "Combinatorial biosynthesis of unnatural and natural products: the polyketide example." Database Caplus on STN. Chemical Abstract No. 123:169385

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pl	48.	Tuan <i>et al.</i> , "Cloning of Genes Involved in Erythromycin biosynthesis from <i>Saccharopolyspora erythrae</i> using a novel actinomycete- <i>Escherichia coli</i> cosmid." <i>Gene</i> (1990) 90:21-29
pl	49.	Tsoi, <i>et al.</i> , "Combinatorial biosynthesis of unnatural and natural products: the polyketide example," <i>Chem. Biol.</i> , 2(6):355-362

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